

From owner-qrp-l@netcom.com Tue Oct 18 16:56:14 1994  
Date: Tue, 18 Oct 94 11:46:02 MDT  
From: miker@cc.com (Mike Robinson)  
Message-Id: <9410181746.AA16432@cc.com >  
Subject: 30-40 fixed

I found the problem. Sometimes it takes a smack in the head but I followed the fundamental rules of homebrewing. Go slow, check your work and take nothing for granted.

While trying to find the right cap value to put in parallel with the VFO trimmer cap, the board was in and out of the case many times. I tried to be gentle each time, still the board is stressed.

One of the xtal's solder joints had gone cold. But it still looked solid. Even when I knew what I was looking at. So, resolder, reeeeeeeal good, realign the rig and voila', %100 back to normal.

Now I put a 18pF cap in parallel with the trimmer cap and low and behold I'm tuning down to 9097. Adjust the trimmer and there it is: 10100 at the bottom end.

I don't mind one bit going through this kind exercise. I feel I know this little rig really well now.

=====  
72 de Michael kg0ot ( formerly kd6wdd, soon to be aa0s? )  
miker@cc.com ---<< I'm the last 'S' in KISS >>===  
=====

From owner-qrp-l@netcom.com Tue Oct 18 04:05:41 1994  
Date: Mon, 17 Oct 94 13:36:52 MDT  
From: miker@cc.com (Mike Robinson)  
Message-Id: <9410171936.AA15307@cc.com >  
Subject: <didn't bother to add a subject>

Hmmm. What's happening here? I built the 30-40 and aligned ok. The receiver is fine. The xmitter is curious though.

First off, everything is stock and unmodified. The final is the 2n3053 with a homemade heatsink. When I first brought it up, the power out was at the expected .95w

and I made a contact from Colorado to Michigan. Great.  
Then a friend explained that the CW portion of the 30m  
band is at the bottom, ie., 10100 to 10125.

My rig tuned from 10115 to 10145. Plenty of RTTY up  
there. So I rewound the VFO toriod and checked the  
range: 9045 to 9080 or so. Nope no priveledges there.

Then I pulled a winding off the toriod and brought the  
range back up to about 10110 at the bottom end. I tried  
squeezing the windings together and got it down to  
10108.

After studying the schematic (I'm not an EE) I decided  
to try raising the capacitor range on the VFO trimmer  
capacitor. Normally the range is from 2-27pF. After  
experimenting with several values, I found that a 15pF  
cap in parallel with the trimmer cap would bring the  
VFO range down to 10102. I can live with that.

But now the xmitter is behaving eradically. The output  
became intermittent. Sometimes I would hear a click  
on key down but no tone. If I gave the chassis a thunk  
the xmit would sound normal for a few keys then go  
back to just clicking and no power on the meter.

Sometimes the intermittency was random without my help.

So I decided to back out completely and removed the 15pF.  
Now if the RF gain is at max, I get no tone or power  
output, if I pull back on the RF gain pot, I get power  
and tone.

My priorities have suddenly changed. I'm less concerned  
now with the range as I am with the controllable  
intermittency.

What did I break?

How can I get the VFO range down to 10100?

Is the xmitter touchy enough that the tuning range  
effects the transistor performance?

Anyone else have input on setting the tuning range?

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=====
72 de Michael kg0ot      ( formerly kd6wdd, soon to be aa0s? )
miker@cc.com            --==<< I'm the last 'S' in KISS >>==--
=====
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From owner-qrp-l@netcom.com Tue Oct 18 22:20:17 1994  
From: Toshiyuki Ando <ando@oecj.co.jp>  
Subject: <didn't bother to add a subject>  
Message-Id: <9410182323.AA17614@take.oecj.co.jp>  
Date: Wed, 19 Oct 94 8:23:29 JST

subscribe ando@oecj.co.jp/post

From owner-qrp-l@netcom.com Tue Oct 18 09:16:17 1994  
Date: Mon, 17 Oct 1994 10:37:40 -0400  
From: acpy01!vmdoug.utsd.att.com!os2user@acpy01.attmail.com  
(os2user@vmdoug.utsd.att.com)  
Subject: Are there are 15m CW transmitter kits ?  
Message-Id: <9410171350.AA0363@vmdoug.utsd.att.com>

Having recently upgraded to Advanced, and having been bitten by the satellite bug, I now find myself looking for a small 15m CW transmitter that will cover a resonable slice of the uplink sub-band for RS-12 (21.225-21.250 Mhz).

Does anyone know of any companies that provide a 15m version of their CW kits? Has anyone put the NN1G on 15 meters??? A quick check through my catalog pile showed kits for the usual 80/40/30/20 bands but nothing for 15m.

I'm also considering the VX0 transmitter in the ARRL handbook. Anyone have any experience with that one? It seems okay, except that I would need four or five crystals to cover the whole uplink, and for that price....

Any and all suggestions welcome.

Doug KA2UPW/AA  
doug@acpy01.utsd.att.com

From owner-qrp-l@netcom.com Tue Oct 18 07:04:26 1994  
Date: Mon, 17 Oct 94 18:04:09 HST  
From: jeffrey@math.hawaii.edu (Jeffrey Herman)  
Message-Id: <9410180404.AA13993@kahuna.math.hawaii.edu>  
Subject: Re: diode on FET gate

The timing of this topic is perfect; I'm just finishing a 40M VFO that calls for a 1N914 diode between the gate of an MPF102 and ground (in the oscillator tank).

Jeff NH6IL

From owner-qrp-l@netcom.com Tue Oct 18 07:35:27 1994  
Date: Tue, 18 Oct 94 13:40:42 EST  
From: richard@dnd.icp.nec.com.au (Richard Urmonas)  
Message-Id: <9410180340.AA09944@durian.dnd.icp.nec.com.au>  
Subject: diode on FET gate

Most oscillators have a harmonic content. Briefly one of the requirements for an oscillator is that the loop gain is greater than 1. This means that the amplitude of the waveform will increase until the gain reduces. This is generally when the output starts to come close to saturation / cutoff. This of course distorts the waveform resulting in harmonic output.

My understanding for the diode was to establish the gain limit at a point where the gate is not damaged. The diode is used to "clip" the waveform on the gate, resulting in a loss of gain at a point within the gate voltage limits.

73

Richard Urmonas.

From owner-qrp-l@netcom.com Tue Oct 18 19:08:55 1994  
Date: Tue, 18 Oct 1994 13:24:22 -0600 (MDT)  
From: Dave Kelly <aa7tq@ramp.com>  
Subject: Doesn't hurt to ask (HW-9 matching tuner?)  
Message-Id: <Pine.3.89.9410181316.A4150-0100000@glock.ramp.com>

Hi guys and gals,

The last time I sent out a message saying it didn't hurt to ask I was looking for an HW-9. A few weeks later I actually got an offer and bought it right away. So, since that worked I thought I'd look for the matching tuner. Anyone have one just sitting around that they would like see get a lot of love and care? (for a price I'm sure)

Meanwhile, I'm having a ball on HF with 4 watts. Almost wish I didn't like my TS-450 so much.

I was also wondering why QRPers used 72 instead of 73? I would think 7.3 would be more in line with our interests.

7.3

Dave, AA7TQ@ramp.com  
(www home page [www.ramp.com/~aa7tq](http://www.ramp.com/~aa7tq))

From owner-qrp-l@netcom.com Tue Oct 18 09:31:58 1994  
Date: Mon, 17 Oct 1994 21:41:11 -0600 (MDT)  
From: Rick Zabrodski <zabrods@med.ucalgary.ca>  
Subject: Re: FALL ARCI CW QSO PARTY  
Message-Id: <Pine.SUN.3.91.941017213034.2899A-100000@ume>

Several hours of concerted effort concentrating on different propagation made this effort much more fun than last time!

Tribander is down and replaced with a 20 m monbander.....yes, there was a difference (up at 65 feet)

nice to work HP1AC again, enjoyed two "new" ones Nfld and VT.

Score: 54 q 31 spc times 7 = 53,816

Good workup for the big boys in two weeks!

As a K1EA CT user I REALLY MISSED a computer logging interface....any suggestions? (Pileups much easier to handle when typing!)

By the way, my subscription to ARCI lapsed again.....no renewal notice means I forget to send more money. Where and how much money do I send?

73.... hope to see you guys during SS if not up to CQWW!

```
*****
Dr. Rick Zabrodski BSc, MD, CCFP(E)      *           VE6GK "glider king"
EMAIL:  zabrodsk@med.ucalgary.ca          *           "M.D. on weekdays"
Packet: VE6GK@VE6YYC.#cgy.ab.can.na      *           "Solar powered aviator
Phone: (403) 271-5123  Fax: 225-1276      *           on weekends!"
*****
```

From owner-qrp-l@netcom.com Tue Oct 18 17:46:38 1994  
Date: Tue, 18 Oct 94 13:45:03 -0500  
From: adams@chuck.dallas.sgi.com (chuck adams)  
Message-Id: <9410181845.AA07600@chuck.dallas.sgi.com>  
Subject: Fox Hunt

Gang,

Some have written me notes on the fact that they missed last nite due to confusion over UTC. Good news:

I will be on again tonight and we'll see how it goes.  
Later time though: 0200-0400Z. That's Tuesday nite  
in the USofA, Wednesday in the Queen's Country of England.  
(Sorry George, had to work that in somehow) :-)

I'll start out first 30 on 7.106 and thereabouts for the  
Novices and Techs then migrate to 7.040 to 7.050 MHz.  
I'll be 5W out and let's hope this flood stops in Texas.  
We're expecting 5 inches of rain today alone. Anyone want  
some water to put on the ground rod?

a very wet dit dit

SIG  
Chuck Adams K5FO CP-60  
adams@sgi.com

From owner-qrp-1@netcom.com Tue Oct 18 07:36:15 1994  
Date: Mon, 17 Oct 94 15:40:43 EDT  
From: teda@meaddata.com (Ted Albert)  
Message-Id: <9410171940.AA01552@rain.meaddata.com>  
Subject: fox hunt tonight?

Is there a hunt tonight? Chuck are you the fox for 0100-0300Z 10/18/94?

73 de Ted, KF8EE

From owner-qrp-1@netcom.com Tue Oct 18 21:05:32 1994  
From: qrmodena@csemail  
Message-Id: <9410182139.AA102748@csemail.cropsci.ncsu.edu>  
Subject: Fox Hunting  
Date: Tue, 18 Oct 94 17:39:40 EDT

I hope this doesn't end up as a double posting...but I send it  
originally very early in the morning and it still hasn't appeared  
on the exploder by 5 pm...so here goes about last night.

>From: ab4el (Stephen Modena)  
>Message-Id: <9410180531.AA23949@Cybernetics.NET>  
>Subject: Fox Hunting  
>To: qrp-1@netcom.com  
>Date: Tue, 18 Oct 1994 01:31:10 -0400 (EDT)

Chuck's reminder posting spurred me to jump in tonight.

Heard K5FO several times over the period he was resident in

the 7.040 segment. Here his signal strength was never more than a "1"....his 3-element beam must not have been turned toward me. Nice clean signal.

Looking in such a narrow segment emphasizes the things that occupy 40 down that low. There was the very splattery Cuban voice signal...I hesitate to call it SSB, because I am unsure that it was that mode. Then there was CM8EI and his state-of-the-art self-excited plate amplifier. ;^) Various digital signals came and went...but not as bad as Sunday night.

Heard K4FO working N9UIP...

Heard N5JD/qrp he was 439 here at 01:43....

I was running 4 watts to my vertical dipole.

I worked NT1V Alan in Harvard, MA his: 5(5->9)9 my: 569

Talked on the phone with K1ANX...we missed talking on 7.211 previous night at 00:30 'cuz the band was already too long.

Then worked KT3A Alan, running 2W his: 559 my: 559

Heard KB1ALE work K5FO...then later work N7DQU...rig sounds like the rise time on the keying needs to be a little faster...especially with that bug.

Finally, worked KA3WTF Frank in PA running 5W his: 459->599 my: 439

Enjoyed it!

Steve/AB4EL ab4el@Cybernetics.NET

From owner-qrp-l@netcom.com Tue Oct 18 15:17:56 1994

Date: Tue, 18 Oct 94 11:26:53 MDT

From: miker@cc.com (Mike Robinson)

Message-Id: <9410181726.AA16408@cc.com >

Subject: Good Company

It becomes readily obvious, after reading the list for awhile, that we all do nearly

the same.

I love to hear from you that disclaim before  
confessing.

I myself, have a very humble workshop/hamshack.  
I somehow convince myself that most of you have  
a glorious workshop with glittering test equipment  
and endless arrays of glowing tubes. It is very  
comforting to know that most of us suffer from  
similar ailments: limited budget, family priorities,  
the pursuit of new toys, the joy of a good challenge.

It is clear that we do what can with what we have,  
and we are all successful and willing to share.

This is good company.

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=====
72 de Michael kg0ot      ( formerly kd6wdd, soon to be aa0s? )
miker@cc.com            ---==<< I'm the last 'S' in KISS >>===
=====
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From owner-qrp-l@netcom.com Tue Oct 18 09:12:20 1994  
Date: Tue, 18 Oct 1994 10:00:31 +1000 (EST)  
From: Howard Anders <h.anders@trl.oz.au>  
Subject: Halp!  
Message-Id: <Pine.SUN.3.90.941018095612.23714E-100000@shiva>

Sorry to bother the list with this, BUT I have tried to unsubscribe the  
"correct way" (due to lack of time to read the otherwise excellent messages)  
but STILL the mail keeps coming!!  
I wonder if anyone can fix this or advise? Tks.  
Howard Anders  
(h.anders@trl.oz.au)

From owner-qrp-l@netcom.com Tue Oct 18 15:57:28 1994  
Date: Tue, 18 Oct 94 07:57:29 HST  
From: jeffrey@math.hawaii.edu (Jeffrey Herman)  
Message-Id: <9410181757.AA16256@kahuna.math.hawaii.edu>  
Subject: HW-8 For Sale

I don't supposed this will last long... Yanked this from  
rec.radio.swap

Jeff NH6IL

\*\*\*\*\*



Article: 16304 of rec.radio.swap  
>From: ku9c@aol.com (KU9C)

I've got a Heathkit HW8 QRP transceiver with HW7.1 power supply. In great shape. First \$150 and it's shipped UPS to your door.

Respond via email or via 201-581-3195 (leave a message)  
73 steve KU9C

From owner-qrp-l@netcom.com Tue Oct 18 20:41:04 1994  
Message-Id: <199410182109.AA28610@halcyon.com>  
Date: Tue, 18 Oct 1994 14:09:56 -0700  
From: xenolith@halcyon.com (Kevin Purcell)  
Subject: Re: HW-8 For Sale

>I've got a Heathkit HW8 QRP transceiver with HW7.1 power supply. In great  
>shape. First \$150 and it's shipped UPS to your door.

Like I tell my wife ... "this isn't junk, dear, its an investment". She normally wanders away saying something about "boys and their toys".

Some QRP equipment prices are insane :-)

|                                           |               |                      |              |
|-------------------------------------------|---------------|----------------------|--------------|
| Kevin Purcell                             | N7WIM / G8UDP | xenolith@halcyon.com | 206/649-6489 |
| Seattle dBug Mac Developers SIG organiser |               | kevinpu@atm.com      |              |

From owner-qrp-l@netcom.com Wed Oct 19 00:26:21 1994  
Date: Tue, 18 Oct 1994 20:57:12 -0400 (EDT)  
From: "John A. Evans" <jaevans@clark.net>  
Subject: HW-8 Handbook  
Message-Id: <Pine.3.89.9410182003.A20135-0100000@explorer>

Just in case I do not post erroneous info, does anyone have current info on the availability and cost of the HW-8 Handbook from Michael Bryce, WB8VGE ??

thanks in advance.  
72

john

-----  
John A. Evans, Capt, USAF

"My number one goal as a

VHDL/EDA Engineer  
N3Q00 Tech Plus !!!

runner is to live long enough  
to place in my age group!!!"

jaevans@clark.net

-----  
Mother's Breast Milk - Baby's drug of choice !!  
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From owner-qrp-1@netcom.com Tue Oct 18 03:57:00 1994  
Date: Mon, 17 Oct 1994 21:45:36 -0400 (EDT)  
From: "John A. Evans" <jaevans@clark.net>  
Subject: HW-9 Recommended Mods  
Message-Id: <Pine.3.89.9410172134.A29660-01000000@explorer>

Greetings All,

I picked up an HW-9 with antenna tuner and power supply this last weekend at a local hamfest (won't tell you how much &^ ) and am digging thru the past issues of QRP-Qtrly for mods. I also ordered the HW-8 Mod handbook.

Any recommended mods to pursue or stay away from?? Now if I only had the time.....

72

john

-----  
John A. Evans, Capt, USAF  
VHDL/EDA Engineer  
N3Q00 Tech Plus !!!

"My number one goal as a  
runner is to live long enough  
to place in my age group!!!"

jaevans@clark.net

-----  
Mother's Breast Milk - Baby's drug of choice !!  
-----

From owner-qrp-1@netcom.com Tue Oct 18 20:39:46 1994  
Message-Id: <m0qxLHP-000BbZC@mercury.mcs.com>  
Date: Tue, 18 Oct 1994 15:36:10 -0500  
From: johnflem@popmail.mcs.com (John Fleming)  
Subject: Index Labs QRP+???

I've been reading really good things about the QRP+ transceiver from Index Labs in California. Anybody using one ? Are they finally shipping in quantity?

Also, Somehow I missed the details on this NORCAL rig everybody talks about. What's the scoop? Spec sheets? Kits available?

I have built 3 kits, Ramsey and Oak Hills. I've never made a contact on any of them, but make contacts with the MFJ ready-bought.

Maybe I should stick to ready-made, but I just love homebrew. Just wish I could use what I build.

John, N9NDH

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My Opinions are free, Advice will cost you

John Fleming

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From owner-qrp-1@netcom.com Tue Oct 18 07:38:49 1994  
Message-Id: <199410172040.AA08009@halcyon.com>  
Date: Mon, 17 Oct 1994 13:41:38 -0700  
From: xenolith@halcyon.com (Kevin Purcell)  
Subject: Re: light sensitive VF0s &c

>I just read the note about a vfo that shifts when you  
>put shade over the board. It's the diode between the  
>gate and ground what's doing it.

Perhaps its finally time to get rid of this diode?

I think the original reason for this diode (ostensibly to stop forward conduction through the JFET on positive half cycles) was to reduce drift.

Ulrich Rohde in a recent QEX article showed that adding the diode worsens the phase noise by about 10dB or so and didn't improve performance by any. He was of the opinion that it was not needed except that it helped make the VFO a little less suseptible to component tolerences. You better off using a high gm JFET (one from the 2n54xx series or a J310 or better) than rely on this.

Perhaps there is a lot of thermal drift out there that is really "photo" drift!

73

|                                           |               |                      |              |
|-------------------------------------------|---------------|----------------------|--------------|
| Kevin Purcell                             | N7WIM / G8UDP | xenolith@halcyon.com | 206/649-6489 |
| Seattle dBug Mac Developers SIG organiser |               | kevinpu@atm.com      |              |

From owner-qrp-l@netcom.com Tue Oct 18 08:31:12 1994  
From: khd@karloff.lanl.gov  
Message-Id: <199410171453.HAA15710@mail3.netcom.com>  
Subject: QSO Party: Is it me or ... ?  
Date: Mon, 17 Oct 94 8:56:53 MDT

I'm a little hesitant to post this to the group, but here goes:

Whew, that was my first contest since FD 1963. I chose to operate single band on 20 meters with my NN1G kit and a dipole on the roof. However, I am probably in the running for the lowest qso rate in the contest - a little under 7 hours with only 16 qso's and 14 spc's. In the process I may have re-invented a couple of wheels. I remember a posting from last Spring's QSO Party (I think) from someone in the group who forgot all his Morse Code during the contest. Though I don't hunt, I think deer hunters call it "Buck Fever." Well, Saturday I had the same problem, especially with my sending. I was grateful no one replied "QLF" (or maybe that is why I had so few responses to my calls). That was the other problem I had - no one (except the above mentioned 16) responded to my calls. Only rarely did I send CQ; I mainly hunted around for others calling and then replied. Most of the time I got no response, even when there seemed to be no competition. From the I-netters alone I heard ac4hf and wa4vqd calling and calling cq but could not get their attention. Now comes the problem: I have a 20M dipole mounted at the peak of the roof. It probably is about 3 feet above the roof in most places. I live in a very dry climate (New Mexico) in a frame house with regular (if heavy) shingles (I put them on myself). I generally have had success with the dipole, especially into the Southern US. However, it began raining Friday and continued without much of a break until early this morning; this is an extremely rare occurrence. It finally occurred to me today that my effective antenna height above ground may have been only 3 feet, rather than the 25 to 30 feet I usually claim. The question is: "Is it me that's all wet or was it really my antenna?"

Keith, ab5qe  
khd@lanl.gov

From owner-qrp-l@netcom.com Tue Oct 18 07:38:55 1994  
From: David Johnson <djohnson@acpub.duke.edu>  
Message-Id: <199410172021.QAA19267@bio7.acpub.duke.edu>  
Subject: Sierra on the air!  
Date: Mon, 17 Oct 1994 16:21:26 -0400 (EDT)

Hey gang:

I operated a bit in the contest this past weekend, but was VERY distracted. You see, the Sierra arrived on Friday! I started building Friday night, and by late Saturday night got it on

40m! It is a gem! A really hot receiver, pretty stable for a fairly simple circuit, and good selectivity.

Puts out a measured (by scope voltage divided by 2.8, squared, divided by 50, you know!) .55w on 40. I thought it was supposed to be a bit more, but that's with the drive control fully up. Did substitute a MPF 102 for the specified 2n4416 for q3, though, as it was missing one of the FETs. Hmmm, well half a watt is fine with me, more than enough to work the world! First QSO was to Minot, ND, which definitely qualifies for over 2000 miles per watt.

I ordered all available band modules, and by late last night (Sunday) had completed the modules for 80, 20 and 30m. In the contest I made qsos with the 80, 40, and 20m modules, and even worked dx (HP1AC) on 20m!

I didn't rack up a high score in the test, as I was too busy building and being thrilled with the performance of the Sierra. It was real easy to align, using a freq counter, ham xcvr as signal source, and eyes and ears!

By the way, does anyone know if those fumes from the solder are bad to inhale? Seems they always go up my nose, even when I try to peep from the side! The smoke just bends in toward my nostrils!

I can't wait to finish the 15m module, and order some more of the module boards to begin to work on getting this beauty on 160, 17, 12, and whatever other meter-bands it can handle!

Best wishes to all!

Dave.

--

|                                |                                  |
|--------------------------------|----------------------------------|
| David W. Johnson               | Power is no substitute for skill |
| Amateur Extra WA4NID           | QRP ARCI 6546                    |
| email: djohnson@acpub.duke.edu | G-QRP 4864                       |
| packet WA4NID@KB4WGA.NC.USA.NA | NorCal 355                       |

From owner-qrp-l@netcom.com Wed Oct 19 00:20:32 1994  
Message-Id: <199410190131.VAA21968@thor.INS.CWRU.Edu>  
From: Stephen Trier <sct@po.cwru.edu>  
Date: 19 Oct 1994 01:30:29 GMT  
Subject: Re: Sierra on the air!

> First QSO was to Minot, ND, which definitely qualifies for over

> 2000 miles per watt.

North Dakota on a brand-new Sierra? Everyone working on WAS will want one now! :-)

> By the way, does anyone know if those fumes from the solder  
> are bad to inhale?

IMHO, it's always good to avoid breathing more burnt chemicals than necessary.

Beyond plain old health, flux fumes make my eyes water. I use a little tabletop fan on one side of my workspace to blow the fumes away. It's about 4 inches above the desk and is aimed straight across. I can smell the smoke, but I don't drown in it.

Stephen

--

Stephen Trier                    "Here, but for an extraordinary physics teacher,  
sct@po.cwru.edu                goes a saxophone player."  
KG8IH                            - Albert Overhauser, National Science Medal winner

From owner-qrp-l@netcom.com Tue Oct 18 12:17:07 1994  
Message-Id: <199410152108.AA26662@halcyon.com>  
Date: Sat, 15 Oct 1994 14:09:14 -0700  
From: xenolith@halcyon.com (Kevin Purcell)  
Subject: Transmitting losses are important on HF

Thoughts from W7EL on losses in antenna systems (take note!):

>Date: 14 Oct 1994 18:12:43 GMT  
>From: royle@tek4.cse.tek.com (Roy W Lewallen)  
>Subject: Superior coaxial line?  
>  
>cgwh@chevron.com (Curtis Wheeler):  
>  
>>Loss is loss, a decibel is a decibel, whether transmitting or receiving.  
>  
>Technically, this is true. But at HF, many decibels can be lost on the  
>receiving end without any impact on the signal/noise ratio, while a dB  
>lost on the transmitting end will result in a 1 dB decrease in the  
>signal/noise ratio. This is because the majority of the system noise is  
>caused by the atmosphere and other sources between the transmitting  
>and receiving antennas. At VHF and UHF, the noise of the receiver  
>dominates, and a dB loss at either end will result in a dB reduction

>in signal/noise ratio.

>

>Roy Lewallen, W7EL

>roy.lewallen@tek.com

Kevin Purcell        N7WIM / G8UDP                xenolith@halcyon.com    206/649-6489  
Seattle dBug Mac Developers SIG organiser    kevinpu@atm.com

From owner-qrp-l@netcom.com Tue Oct 18 08:21:02 1994

Message-Id: <9410172007.AA5090@bobea.watson.ibm.com>

Date: Mon, 17 Oct 94 15:57:08 EST

From: "Robert E. Easton                8-862-3241"                <bobea@watson.ibm.com>

Subject: Tuning to zero beat

>> I think all the YaeComWoods are now set up so that when you match the  
>> received audio freq. to your sidetone freq., you are zero-beat.

Stephen Trier wrote:

> ... much deleted.

>Figuring out how to do it on QRP rigs will be interesting. ...

>

I -think- I'm getting "right on" with my OHR Spirit. I set the filter to peak audio at 750 hz (a little gentler than 800). Reference was a simple tone program on a computer. No tuning forks. :-) Then, there's a carrier adjustment which allows adjusting the center frequency of the carrier to something other than the filter peak, i.e. 750 lower. Altho it's sounds difficult, it's really easy to adjust when you have an accurately adjusted rig nearby. Lastly, the sidetone oscillator is also adjusted to 750.

After these adjustments, you hear another signal at it's peak when you hear the 750 tone, and that coincidently places your carrier exactly centered on his. One last thing is needed though.... How well can you identify 750? I'm not as accurate as most musicians, so I've added a spot switch will will key only the sidetone osc while receiving. Press the spot switch to hear the sidetone, adjust tuning of the rcvd sig to match, and VIOLA we're there!

73, Bob - N2IPY